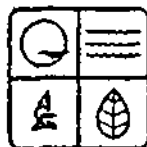


JOSEPH P. TEASDALE  
GOVERNOR



CAROLYN ASHFORD  
DIRECTOR

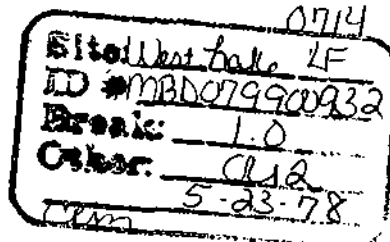
# missouri department of natural resources

2010 Missouri Blvd.  
P.O. Box 1368 Jefferson City, Missouri 65101 314-751-3241

May 23, 1978

*New Site*

Mr. W. J. McCullough  
Secretary - Treasurer  
West Lake Landfill, Inc.  
Route 1, Box 206  
Bridgeton, Missouri 63042



Dear Mr. McCullough:

This is to acknowledge receipt and approval of revised engineering plans submitted by Paul H. Himebaugh, Consulting Engineer, for the three and one-half acre expansion to the existing permitted sanitary landfill operated by West Lake Landfill, Inc. By this letter we hereby approve operation of the three and one-half acre expansion area under the provisions of the existing sanitary landfill operating permit. This approval is given with the understanding that the landfill will be operated in accordance with the Missouri Solid Waste Rules and Regulations and the engineering design plans dated December 10, 1977.

This approval is given with the following recommendations:

1. that a new leachate collection well be constructed at the south end of the proposed expansion area as indicated in the engineering plans as an alternate method of handling the leachate. It is not necessary that the leachate collection well be constructed larger than that required for the lowering of pumping equipment into the well. This recommendation is made because of the indicated depth of leachate in the existing landfill leachate collection well. If you attempt to excavate into the permitted landfill area, leachate may flow out into the expansion area, causing operational problems and odors.
2. that two additional monitoring wells be constructed along the west side of the new expansion area between the landfill and Old St. Charles Rock Road. The monitoring wells should be constructed to a depth of at least 42' or to a depth of ten feet into the groundwater.

40241311



SUPERFUND RECORDS

Division of Environmental Quality

DNR 0199

Mr. McCullough  
Page 2  
May 23, 1978

Attached is a list of parameters for sanitary landfill monitoring. The monitoring wells are to be sampled and analyzed every six months, with results of the analysis sent to the Department of Natural Resources, Solid Waste Management Program. The first time the monitoring wells are sampled they should be analyzed for all parameters listed. The monitoring wells are also to be sampled every two years thereafter and analyzed for all parameters. At the time of the other six month sampling periods, it is only necessary that the samples be analyzed for the key indicators (indicated by an asterisk).

Two of the monitoring wells at the existing permitted sanitary landfill have been accidentally destroyed, and two of the monitoring wells have never been constructed. We are hereby requesting all of these monitoring wells be replaced or constructed and be sampled every six months as indicated in the previous paragraph. This should be accomplished at the earliest possible date.

It is recommended that you continue to pump the existing landfill leachate collection well to determine the amount of leachate to be treated and decide whether you plan to continue to haul the leachate to M.S.D. or to provide on-site treatment and disposal.

If you have any questions, please advise.

Sincerely,



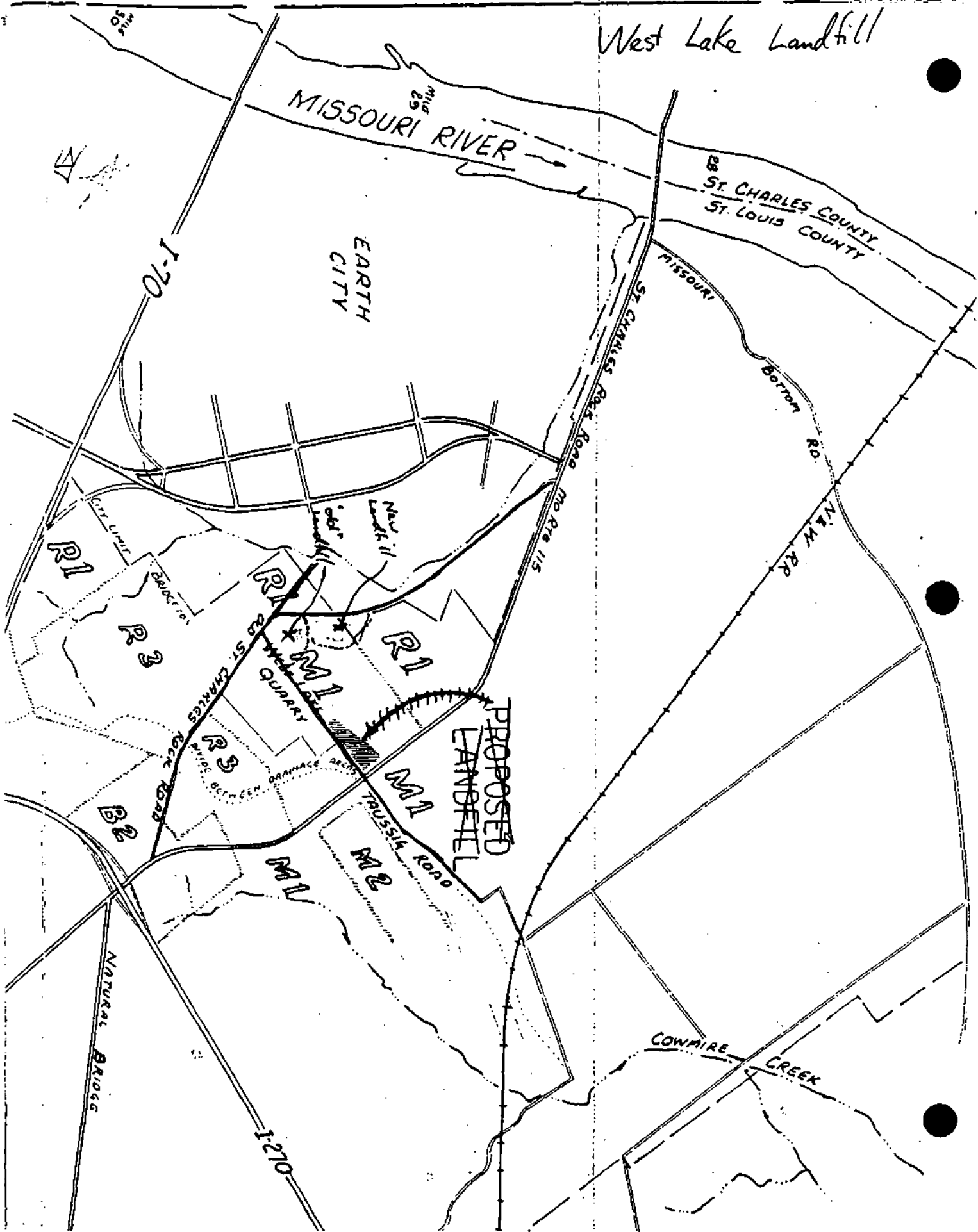
Robert M. Robinson, P.E.  
Director  
Solid Waste Management Program

RMR:pdj

cc: St. Louis Regional Office  
Paul H. Himebaugh, Consulting Engineer  
St. Louis County Health Department  
Mr. Canney

St. Louis Co.

# West Lake Landfill



we have no data on groundwater



Over

N



Westlake SLF

REPORT OF APPROVAL OF PLANS AND SPECIFICATIONS  
FOR SOLID WASTE DISPOSAL AREAS  
ST. LOUIS COUNTY, MISSOURI

August 27, 1974

old Site

INTRODUCTION

An application for operating permit has been filed requesting a permit to operate a sanitary landfill designated in the application as the West Lake Landfill, Inc. The application was filed by West Lake Landfill, Inc., and signed by W. M. McCullough, Secretary-Treasurer. Plans, specifications and operating procedures for the sanitary landfill have been submitted to the Bureau of Solid Waste Management for review and approval by Rogers and Associates, Inc., Consulting Engineers, St. Louis, Missouri. These plans, specifications and operating procedures have been reviewed for compliance with the Missouri Solid Waste Management Law of 1972 (Section 260.200 to 260.245 RSMo., Supplement 1973) and the Missouri Solid Waste Rules and Regulations.

BRIEF DESCRIPTION

The proposed sanitary landfill site is a 25 acre portion of a 212 acre tract of land in U.S. Survey 47, 131 and 193 and parts of Townships 46 and 47 N., Range 5 E., St. Louis County, Missouri. The limits of the proposed sanitary landfill are shown on Plate # 2-1 of the engineering plans and specifications. Due to the geologic setting of the proposed sanitary landfill site and the presence of groundwater at relatively shallow depths below the proposed landfill excavation elevation, a two-foot compacted layer of impermeable clay is being required, and the excavation elevation has been limited to elevation 439. The pad will be placed over the entire landfill area at the location shown on Plate # 3-1, and at the elevation shown on Plate 8-2. The pad is to be constructed well in advance of the working face and shall be continuous, homogeneous and well compacted to assure no openings or crevices to allow leachate to flow to the groundwater below. The clay pad shall be spread evenly in six to eight inch layers, rolled with a sheep's foot roller and at completion, in-place permeability tests shall be made. Minimum acceptable results are  $10^{-7}$  centimeters per second. Placement of solid waste on the pad shall not be made until pad construction has met the above specifications.

A leachate collection well shall be constructed to collect any leachate accumulating on top of the impermeable clay pad. Six groundwater monitoring wells are to be constructed as shown on the engineering plans around the perimeter of the sanitary landfill to monitor groundwater quality.

### BRIEF DESCRIPTION CONTINUED

The type of solid waste to be accepted for disposal consists of municipal solid waste. No hazardous waste, bulk liquids, semi-solids, sludges containing free moisture, highly flammable or volatile substances, unexpended pesticide containers, pesticides, raw animal manure, septic tank pumpings, raw sewage sludge, industrial process sludge, radioactive material and explosives shall be accepted. No open burning shall be permitted.

The area method of sanitary landfill operation will be utilized to raise the proposed landfill area to an elevation of approximately 470. All fencing, gates, equipment maintenance buildings, operating equipment, all-weather access roads, surface water control devices, leachate collection and treatment devices, and other necessary appurtenances shall be provided and maintained as per the approved plans, specifications and operating procedures.

### RECOMMENDATIONS

1. Plate # 11-0 shows the groundwater monitoring wells extending to elevation 439. The groundwater monitoring wells shall be constructed as indicated in the drawing but shall be extended a minimum of 24 inches below the elevation at which groundwater is encountered.
2. The surface water drainage ditch shown on the cross-sections on Plate # 8-2 along the eastern edge of the proposed sanitary landfill shall be located approximately 25 feet further east so that the flow line of the ditch is located on natural ground rather than over the landfill.

### APPROVAL

The plans, specifications and operating procedures described above have been examined as to sanitary features of design which might affect the operation of the solid waste disposal area as a sanitary landfill. Approval of the plans, specifications and operating procedures as revised is hereby given. This approval is given with the explicit understanding that the sanitary landfill will be developed and operated in compliance with the plans, specifications and operating procedures submitted to the Bureau of Solid Waste Management, the recommendations listed in this report, and the Missouri Solid Waste Rules and Regulations. This approval is not to be construed as compliance with any existing local ordinances or zoning requirements. The Bureau of Solid Waste Management reserves the right to withdraw the approval of these plans, specifications and operating procedures at any time that it is found that additional construction or alteration of the sanitary landfill is necessary to assure compliance with the rules and regulations and to afford adequate protection of the public health.

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Rick L. Roberts, Chief  
Solid Waste Technical Services